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Eingang bei ZPL

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Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°.
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Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
ALCATEL

COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above–mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☐ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

    [X] abstract   [X] title

☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract: 4

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	EP 1 134 922 A (LUCENT TECHNOLOGIES INC) 19 September 2001 (2001-09-19) * column 3, line 55 - column 4, line 55 * * column 5, line 35 - line 45 * * column 14, line 28 - line 30 * * column 14, line 43 - column 15, line 8 * * column 20, line 13 - line 30 * * column 20, line 31 - column 21, line 38 * * column 23, line 35 - line 54 *	1,3,5,9, 10	H04Q11/00 H04J3/08
A	"STS-1 SONET Grooming Using Kichips KiSS VXE and ClassAct MPP" KICHIPS, WHITE PAPER, 'Online! October 2002 (2002-10), XP002260856 Retrieved from the Internet: <URL:http://www.kichips.com/papers/sts1_wh itepaper.pdf> 'retrieved on 2003-09-25! sections 1-2 section 5	1-10	
A	US 6 215 763 B1 (HARSHAVARDHANA PARAMASIVIAH ET AL) 10 April 2001 (2001-04-10) * column 1, line 41 - line 46 * * column 10, line 37 - line 53 *	1-10	**TECHNICAL FIELDS SEARCHED (Int.Cl.7)** H04Q H04J

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	27 November 2003	Fleckinger, C

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,A	ANDERSON J ET AL: "FAST RESTORATION OF ATM NETWORKS" IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, IEEE INC. NEW YORK, US, vol. 12, no. 1, 1994, pages 128-138, XP000493894 ISSN: 0733-8716 * page 132, left-hand column, line 25 - line 27 * * page 135, left-hand column, line 1 - line 9 * * page 135, right-hand column, line 1 - line 16 *	1-10	
D,A	"Interface for the optical transport network (OTN)" ITU-T RECOMMENDATION G.709, XX, XX, February 2001 (2001-02), pages 1-80, XP002195641 section 15.2	1-10	
A	PAPADIMITRIOU D ET AL: "ANALYSIS OF GENERALIZED MPLS-BASED RECOVERY MECHANISMS (INCLUDING PROTECTION AND RESTORATION), INTERNET DRAFT, INTERNET ENGINEERING TASK FORCE (IETF)" , 7 November 2002 (2002-11-07), XP002234808 Retrieved from the Internet: <URL:http://www.ietf.org/internet-drafts/draft-papadimitriou-ccamp-gmpls-recovery-ana> 'retrieved on 2003-03-14! * the whole document *	1-10	TECHNICAL FIELDS SEARCHED (Int.Cl.7)

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	27 November 2003	Fleckinger, C

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EPO FORM 1503 03.82 (P04C01)

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-11-2003

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 1134922	A	19-09-2001	AU	2651101 A	20-09-2001
			CA	2337352 A1	17-09-2001
			CN	1314749 A	26-09-2001
			EP	1134922 A2	19-09-2001
			JP	2001298456 A	26-10-2001
US 6215763	B1	10-04-2001	NONE		

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**Erweiterter Europäischer Recherchenbericht
Extended European Search Report
Rapport de Recherche Européenne Élargi**

Anmelde-Nr.:
Application No.: 03 290 787.5
Demande no:

This application is covered by the extended European search report pilot project at present running within the European Patent Office, applied to all European patent applications filed as first filing and searched on or after 01.07.03. Under this project the EPO issues together with the search report an opinion on whether the application and the invention to which it relates meet the requirements of the EPC. This non-binding opinion is issued free of charge as a service. This opinion may be used as the basis for an informed decision as to whether it is desired to pursue the application further or not.
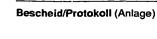
For further details of this pilot project, the applicant's attention is directed to the Official Journal edition 5/2003. If any further immediate questions or comments arise the EPO Customer Services: +31-70-340 4500 or +49-89-2399 2828 can be contacted.

The attached opinion reveals that the application or the invention to which it relates appear not to meet the requirements of the Convention (see comments on enclosed Form 2906).

If the applicant wishes to continue with this application the examination fee must be paid. Where appropriate amendments can be filed to address the objections raised in the opinion, thus shortening the overall procedure. If no amendments are filed, the opinion will be re-issued as the first official communication under Article 96(2) and Rule 51(2) EPC.

If the examination fee has already been paid and the right to the communication under Article 96(1) EPC has been waived for this application, the first official communication under Article 96(2) and Rule 51(2) EPC will be issued promptly.

Should the present application have been considered by the examiner as lacking Unity of invention under Article 82 EPC to an extent preventing performance of a full search, a separate communication to this effect will be sent as laid down in Rule 46 EPC. The text of the extended European search report will make reference to the non-unity objection and the searched subject-matter but will not normally make further reference to the unsearched matter. Only that matter searched in the initial search report will be the subject of a communication under the extended European search report pilot project

The examination is being carried out on the **following application documents**:

Text for the Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE SI SK TR LI RO

Description, pages:

1-20   as originally filed

Claims, No.:

1-10   as originally filed

Drawings, sheets:

1/3-3/3   as originally filed

1   The following document (D) is referred to in this communication; the numbering will be adhered to in the rest of the procedure:

     D1: EP-A-1 134 922 (LUCENT TECHNOLOGIES INC) 19 September 2001 (2001-09-19)

2   The application does not meet the requirements of Article 84 EPC, because claims 1-10 are not clear.

2.1   The object of the invention is to provide fast restoration technique in a transport network (see description p.3 l.30 - p.4 l.31)
It is therefore clear from the description on page 3-4 that the features of
     - detecting a failure of an already existing path at a first network element
     - crossconnecting at first network element the affected traffic stream to an
     alternate outpout
are essential to the definition of the invention. Since independent claim 1 does not contain these features it does not meet the requirement following from Article 84 EPC taken in combination with Rules 29(1) and (3) EPC that any independent claim must

| Bescheid/Protokoll (Anlage) | Communication/Minutes (Annex) | Notification/Procès-verbal (Annexe) |

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Anmelde-Nr.:
Application No.: 03 290 787.5
Demande n°:

contain all the technical features essential to the definition of the invention.

2.2   The wording "frames being structured according to a multiplex hierarchy into multiplex units respectively representing paths through ... said transmission signals" is not clear and should be reformulated in a proper way. In the following this wording will be interpreted as meaning that each frame is fragmented in slots, each slot representing a path in the network, the information contained in the same slot of subsequent frames forming a traffic stream. The traffic streams are thereby multiplexed and form the transmission signals. (see desc p.5)

2.3   The wording "repeating every frame" used in claims 1, 6, 9 and in the description means that each frame is sent many times with the same content. This is obviously not what is meant by the applicant. In the following it will be considered that only the frame stucture is repeated.

2.4   The wording "appropriate" used in claims 1, 2, 5, 9 is vague and unclear. It should therefore be removed.

2.5   The wording "new traffic stream" used in claim 1 is not clear.

2.6   The wording "wherein each traffic stream is assigned an identifier" used in claim 6 means that the identifier is assigned by the input port what is in accordance with following of the claim not what the applicant means. It will therefore be interpreted in the following as each incoming traffic stream having an identifier assigned.

2.7   The wording "controlling said input port" is vague and unclear in claim 6

2.8   The wording "crossconnecting a traffic stream affected" in claim 2 suggests that the traffic stream crossconnect is not necessarily the one were the failure was detected before. Claim 2 is therefore unclear. It should be replaced by "crossconnecting the traffic stream affected".

2.9   The wording "unexpected path tag" used in claim 2 is not clear.

3   The present application does not meet the requirements of Article 52(1) EPC,

because the subject-matter of claim 1 is not new in the sense of Article 54(1) and (2) EPC.

The document D1 discloses (the references in parentheses applying to this document):
A method of establishing a path through a transport network (SONET), said network comprising a number of physically interconnected network elements; transmission signals being transported over physical connections between said network elements; each transmission signal being subdivided into frames of the same length, said frames being structured according to a multiplex hierarchy into multiplex units respectively representing paths though said network and repeating every frame thereby forming traffic streams multiplexed to form said transmission signals; said method comprising the step of
- assigning each traffic stream an identifier called hereinafter a path tag (col.20 l.33-37;col.23 l.28-52, the setup signalling message can be considered as a path tag);
- providing forwarding information in each network element along said path to be established (col.20 l.37-l.41);
- receiving a new traffic stream at an input port of a network element (col 18 l.44-l. l.53; signalling message followed by traffic stream);
- checking the path tag of the received traffic stream and determining an appropriate output port based on said path tag and the forwarding information (col.18 l.54-l.57); and
- establishing an internal cross-connection between said input port and said previously determined output port (col.18 l.44-col.19 l.9).

The subject-matter of claim 1 is therefore not new (Article 54(1) and (2) EPC).

4   The document D1 discloses (the references in parentheses applying to this document):
A network management facility for controlling and configuring network elements of a transport network wherein transmission signals are transported over physical connections between said network elements; each transmission signal being subdivided into frames of the same length, said frames being structured according to a multiplex hierarchy into multiplex units respectively representing paths through said network and repeating every frame thereby forming streams multiplexed to for said transmission signals; wherein each traffic stream is assigned an identifier called hereinafter a path tag (see claim 1); said network management facility being adapted

and programmed to determine pre-calculated restoration paths for working paths being established in said network (col 4 l.11-23) and to provide to said network elements forwarding information (col.4 l.26) based on said path tags to allow said network elements to determine an appropriate output port for a traffic stream with an unexpected path tag (col.18 l.44-53) received at an input port by using said path an said forwarding information and to establish an internal cross-connection between said input port and said previously determined output port.

The subject-matter of claim 9 is therefore not new (Article 54(1) and (2) EPC). The behaviour or features of the network elements can not be considered as characterizing the network management facility.

5   Dependent claims 3,5,10 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the EPC with respect to novelty or inventive step.

6   The applicant is requested to file new claims which take account of the above comments.

6.1   It is suggested to draft a new indepedent claim based on the subject-matter of claims 1 and 2, taking into account the above mentionned clarity objections and adding the following features:
- the crossconnection is done without prior configuration of the receiving side (see description p. 11 l.15-16)
- the path tag is sent on a regulary basis (see description p.4 l.28-30)

6.2   Independent claim 6 seems to be allowable once the clarity objections removed and precising that the path tag is sent on a regulary basis (see description p.4 l.28-30).

6.3   Furthermore the applicant should consider the following point:
The following passages of the description are not allowable and should be deleted:
- page 20 line 8: "the spirit and"
- page 17 line 5-6: "which document is incorporated by reference herein"

6.4   Document D1, which appears to represent the most relevant prior art, should be

acknowledged in the description (Rule 27 (1)(b) EPC).
To meet the requirements of Rule 29(1) EPC the independent claim should be properly recast in the two-part form, with those features which in combination are part of the prior art (see Document D1) being placed in the preamble.

6.5   When filing amended claims the applicant should at the same time bring the description into conformity with the amended claims. Care should be taken during revision, especially of the introductory portion and any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as original filed (Art. 123(2) EPC).

6.6   In order to facilitate the examination of the conformity of the amended application with the requirements of Article 123(2) EPC, the applicant is requested to clearly identify the amendments carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and to indicate the passages of the application as filed on which these amendments are based.

If the applicant regards it as appropriate these indications could be submitted in handwritten form on a copy of the relevant parts of the application as filed.